

**Table 11.**

**Cross Cutting Issues Technical Work Group**  
**Summary List of Draft Policy Options (4 Total)**

#	Policy Name	Potential Next Steps
<b>CROSS CUTTING ISSUES</b>		
CC-1	State Greenhouse Gas Goals	Quantify for TWG review
CC-2	State Greenhouse Gas Reporting	Draft recommendation without quantification
CC-3	State Greenhouse Gas Registry	Draft recommendation without quantification
CC-4	State Climate Action Education	Draft recommendation without quantification
CC-5	State Climate Change Adaptation Strategy	Draft recommendation without quantification

**Table 12.**

**Description of Draft Cross Cutting Policy Options**

**CROSS CUTTING ISSUES**

**CC-1 State Greenhouse Gas Goals**

**Option Category:** Quantified.

**Policy Description:**

Statewide GHG emissions reduction goals and or targets for future time periods.

**Policy Design:**

The CCAG requested exploration of a statewide emissions reduction target that would continue to 2050, extending the scenario that reduces growth in total statewide GHG emission levels starting in 2005 by 25% in 2010 and 50% in 2020. In addition, the CCAG requested inclusion of the common but differentiated goals of Annex 1 countries under the Kyoto Protocol to the UNFCCC.

- **Goal levels:** As noted above.
- **Timing:** As noted above.
- **Parties:** All.
- **Other:**

**Implementation method(s):**

**Related Policies/Programs in place:**

**Types(s) of GHG Benefit(s):**

**Estimated GHG Savings and Costs Per Ton:**

- GHG potential in 2010, 2020
- Net Cost per tCO<sub>2</sub>e in 2010, 2020

**Data Sources, Methods and Assumptions (for quantified actions):**

- **Data Sources:**
- **Quantification Methods:**
- **Key Assumptions:**

**Key Uncertainties:**

**Ancillary Benefits and Costs, if applicable:**

**Feasibility Issues, if applicable:**

**Status of Group Approval:**

**Level of Group Support:**

**Barriers to consensus (if less than unanimous consent):**

**CC-2 State Greenhouse Gas Reporting**

**Option Category:** Not Quantified.

**Policy Description:**

Measurement and public reporting of GHG emissions at a statewide, sector, or sub-sector level to support tracking and management of emissions. GHG reporting can help sources identify emission reduction opportunities and reduce potential risks associated with possible future GHG mandates by starting “up the learning curve.” Tracking and reporting of GHG emissions will also help in the construction of periodic state GHG inventories. GHG reporting is likely to be a precursor for sources to participate in voluntary GHG reduction programs, opportunities for recognition, a GHG emission reduction registry, and to secure “baseline protection.” Further, GHG reporting is an opportunity for the state to influence reporting practices throughout the region and nation, and to build consistency with other reporting programs. Subject to appropriately rigorous quantification, GHG reporting should not be constrained to particular sectors, sources, or approaches so as to encourage GHG mitigation activities from all quarters.

**Policy Design:**

Recommendations for key policy design elements are noted in the accompanying “*GHG Reporting Design Options Matrix*.” Elements include:

- Phasing in mandatory GHG reporting by sectors as rigorous, standardized quantification protocols, base data, and tools become available and responsible parties become clear; allowing for voluntary reporting before mandatory reporting applies; allowing the state itself to report emissions associated with its own activities and programs it implements.
- Applicability to all sources (e.g., combustion, processes, vehicles, etc.) but using common sense regarding de minimis emissions.
- Goal of reporting “organization-wide emissions within Arizona” but with greatest possible “granularity” to facilitate baseline protection, e.g., by “rolling up” total of “facility” & “field” emissions reports in a reporting database would provide organization

totals in Arizona.

- Reporting annually on a calendar year basis for all six traditional GHGs and, to the extent possible, black carbon.
- Requiring reporting of direct emissions, phasing in reporting of emissions associated with purchased power and heat, and allowing voluntary reporting of other indirect emissions.
- Maximizing consistency with other state and federal reporting programs.
- Verifying emissions reports through self-certification and ADEQ spot-checks, adding third-party verification for registry purposes.
- Allowing for appropriate public transparency of reported emissions, and allowing voluntary project-based emissions reporting when properly quantified.
- **Goal levels:** Not applicable.
- **Timing:** ASAP, preferably 2008.
- **Parties:** Probably ADEQ.
- **Other:**

**Implementation method(s):**

**Related Policies/Programs in place:**

**Types(s) of GHG Benefit(s):**

**Estimated GHG Savings and Costs Per Ton:**

- GHG potential in 2010, 2020
- Net Cost per tCO<sub>2</sub>e in 2010, 2020

**Data Sources, Methods and Assumptions (for quantified actions):**

- **Data Sources:**
- **Quantification Methods:**
- **Key Assumptions:**

**Key Uncertainties:**

**Ancillary Benefits and Costs, if applicable:**

**Feasibility Issues, if applicable:**

**Status of Group Approval:**

**Level of Group Support:**

**Barriers to consensus (if less than unanimous consent):**

**CC-3 State Greenhouse Gas Registry**

**Option Category:** Not Quantified.

**Policy Description:**

Measurement and recording of GHG emissions reductions at a macro- or micro-scale level in a central repository with a “transaction ledger” capacity to support tracking, management, and “ownership” of emissions as well as to encourage GHG reductions, to enable potential recognition, baseline protection, and/or the crediting of actions by implementing programs and parties in relation to possible emissions reduction goals, and to provide a mechanism for regional, multi-state, and cross-border cooperation. Subject to appropriately rigorous quantification, GHG registration should not be constrained to particular sectors, sources, or approaches so as to encourage GHG mitigation activities from all quarters.

**Policy Design:**

Recommendations for key policy design elements build off the GHG Reporting policy option (CC-2) and are noted in the accompanying “*GHG Registry Design Options Matrix.*”

Elements include:

- Geographic applicability at least at the statewide level and as broadly (i.e., regionally or nationally) as possible.
- Allowing sources to start as far back chronologically as good data exists, as affirmed by third-party verification, and allowing registration of project-based reductions or “offsets” that are equally rigorously quantified.
- Incorporating adequate safeguards to ensure that reductions aren’t double-counted by multiple registry participants; providing appropriate transparency; and allowing the state to be a valid participant for reductions associated with its programs, direct activities, or efforts.
- Striving for maximum consistency with other state, regional, and/or national efforts; greatest flexibility as GHG mitigation approaches evolve; and providing guidance to assist participants.
- **Goal levels:** Not applicable.
- **Timing:** ASAP after GHG reporting is operating.
- **Parties:** Probably overseen by ADEQ; costs shared by participants benefiting from the registry.
- **Other:**

**Implementation method(s):**

**Related Policies/Programs in place:**

**Types(s) of GHG Benefit(s):**

**Estimated GHG Savings and Costs Per Ton:**

- GHG potential in 2010, 2020
- Net Cost per tCO<sub>2</sub>e in 2010, 2020

**Data Sources, Methods and Assumptions (for quantified actions):**

- **Data Sources:**
- **Quantification Methods:**
- **Key Assumptions:**

**Key Uncertainties:**

**Ancillary Benefits and Costs, if applicable:**

**Feasibility Issues, if applicable:**

**Status of Group Approval:**

**Level of Group Support:**

**Barriers to consensus (if less than unanimous consent):**

**CC-4 State Climate Action Education**

**Option Category:** Not Quantified.

**Policy Description:**

Public education and outreach is vitally important to foster a broad awareness of climate change issues and effects (including co-benefits, such as clean air and public health) among the state's citizens and to engage them in actions to reduce GHG emissions. Such efforts should seek to integrate with and build on existing outreach efforts involving climate change and related issues in the state. Ultimately, public education and outreach will be the foundation for the long-term success of all the mitigation actions proposed by the CCAG as well as those which may evolve in the future.

**Policy Design:**

Key policy recommendations are provided in the accompanying "*GHG Education Design Options Matrix*." **Elements include...**

- **Goal levels:**
- **Timing:**
- **Parties:**
- **Other:**

**Implementation method(s):**

**Related Policies/Programs in place:**

**Types(s) of GHG Benefit(s):**

**Estimated GHG Savings and Costs Per Ton:**

- GHG potential in 2010, 2020
- Net Cost per tCO<sub>2</sub>e in 2010, 2020

**Data Sources, Methods and Assumptions (for quantified actions):**

- **Data Sources:**
- **Quantification Methods:**
- **Key Assumptions:**

**Key Uncertainties:**

**Ancillary Benefits and Costs, if applicable:**

**Feasibility Issues, if applicable:**

**Status of Group Approval:**

**Level of Group Support:**

**Barriers to consensus (if less than unanimous consent):**

## **CC-5 State Climate Change Adaptation Strategy**

**Option Category:** Not Quantified.

**Policy Description:**

While taking action to reduce greenhouse gas (GHG) emissions in Arizona, the Governor also should explore, develop, and implement a state climate change adaptation strategy that identifies the potential near-term and short-term impacts of climate change in the State and

outlines steps that should be taken to respond to those impacts. These impacts include the concerns outlined by the Governor in her February 2005 Executive Order (e.g., prolonged drought, severe forest fires, warmer temperatures, increased snowmelt, and reduced snow pack) as well as other serious issues, including risks to public health.

Because of the build-up in the atmosphere of greenhouse gases that already has occurred, Arizona will experience the effects of climate change for years to come, even if immediate action is taken to reduce future GHG emissions. As such, it is essential that the state develop a strategy to manage the projected impacts of ongoing climate change.

### **Policy Design:**

A comprehensive state climate change adaptation strategy should include time- and program-based goals, characterization of the potential risks and costs of inaction, and the potential costs, benefits, and co-benefits associated with specific policy and program actions and time periods.

The Governor should consider appointing a task force or advisory group to develop recommendations for the state adaptation strategy. Moreover, the Governor should direct state agencies and other appropriate institutions to identify and characterize potential current and future risks in Arizona to human, natural and economic systems, including potential risks to water resources, temperature sensitive populations and systems, energy systems, transportation systems, vital infrastructure and public facilities, and natural lands (such as forests, rangelands, and farmland).

Adaptation measures that also help mitigate GHG emissions should be given priority in the state climate change adaptation strategy, particularly water use conservation and efficiency, forest and agriculture conservation and management, energy production and use, facility siting and management, infrastructure development, and efficient transportation and land use systems. These actions should be linked to implementation of other specific recommendations of this Climate Change Advisory Group to the greatest extent possible.

Finally, the state climate change adaptation strategy should be reviewed and updated on a regular basis.

- **Goal levels:**
- **Timing:**
- **Parties:**
- **Other:**

**Implementation method(s):**

**Related Policies/Programs in place:**

**Types(s) of GHG Benefit(s):**

**Estimated GHG Savings and Costs Per Ton:**

- GHG potential in 2010, 2020
- Net Cost per tCO<sub>2</sub>e in 2010, 2020

**Data Sources, Methods and Assumptions (for quantified actions):**

- **Data Sources:**
- **Quantification Methods:**
- **Key Assumptions:**

**Key Uncertainties:**

**Ancillary Benefits and Costs, if applicable:**

**Feasibility Issues, if applicable:**

**Status of Group Approval:**

**Level of Group Support:**

**Barriers to consensus (if less than unanimous consent):**